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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,175	09/10/2001	Richard B Ward	36-1485	9578
23117	7590	04/19/2005	EXAMINER	
NIXON & VANDERHYE, PC 1100 N GLEBE ROAD 8TH FLOOR ARLINGTON, VA 22201-4714			NGUYEN BA, HOANG VU A	
			ART UNIT	PAPER NUMBER
			2192	

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/936,175

Applicant(s)

WARD ET AL.

Examiner

Hoang-Vu A. Nguyen-Ba

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed..
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/12/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the amendment filed November 12, 2004.

Response to Amendments

2. Per Applicants' request, claims 1, 6, 8, 11, 12 have been amended; claim 13 has been added.
3. Claims 1-13 are pending.
4. The Examiner acknowledges receipt of a copy of the Information Disclosure Statement filed November 12, 2004 and a copy of the reference entitled "Design for testability in Object-oriented Systems." It has been placed in the application file and the information referred to therein has been considered.
5. The objection to the drawings filed November 12, 2004 is hereby withdrawn in view of Applicants' amendments to these drawings.
6. The objection to the Specification is withdrawn in view of Applicants' amendment to the Title to make it more descriptive.
7. The objection to the claim 8 is withdrawn in view of Applicants' amendments to correct a minor typographical error.

Response to Arguments

8. The rejection of claims 11 and 12 under 35 U.S.C. § 112, second paragraph as being indefinite is withdrawn in view of Applicants' amendments to these claims to present them in proper format.
9. The rejection of claims 11-12 under 35 U.S.C. § 101 as being directed to non-statutory subject matter is withdrawn in view of Applicants' amendments to claims 11 and 12 to direct these claims to statutory subject matter.

10. The rejection of claims 8 and 9 under 35 U.S.C. § 101 as being directed to non-statutory subject matter is withdrawn in view of Applicants' persuasive argument that the means for capturing the results of the testing and the means for producing report of the results of testing are limited by the physical structure of test criteria store 207 and report generator 207 respectively described in the specification.

11. The rejection of claims 1-5, 6-7 and 10 under 35 U.S.C. § 101 as being directed to non-statutory subject matter is however maintained because 1) the method claimed in claims 1-5, while being a statutory "process," is not directed to a statutory subject matter because the steps performed are not concretely and tangibly embodied and executed by a piece of hardware, notwithstanding their practical application -- the Examiner also notes that structure will not be read into the claims for the purposes of the statutory subject matter analysis; and 2) the means-plus-function limitations in claims 6-7 and 10 are software means and are not concretely and tangibly embodied and executed by a piece of hardware.

12. Rejection of claims 1-12 under 35 U.S.C. § 102:

Applicants essentially argue that Hinckley fails to teach:

a) automatically registering each active element of software in a registry as required by independent claims 1 and 6; instead, Hinckley teaches automatically testing based on a user-defined test specification which is a more onerous task;

b) requiring elements to be registered in a register which automatically associates registered elements with an associated test.

In response to argument a), the Examiner notes that while the claims are interpreted in light of the specification, limitations in the specification should not be read into the claims. In this instance, features in the specification that limit the claimed elements registering, active element of software, and registry will not be read into the claims but will be broadly and reasonably interpreted as configuring, elements

212A-E of the software program (Figure 2) and storage area of test specifications, functions and histories of the test automation system 102, respectively (Figure 2).

In response to argument b), the Examiner notes that Hinckley teachings associates and identifies software program with test specifications and test functions (7:59 to 8:18).

Accordingly, the Examiner respectfully maintains that the rejection of claims 1-12 under 35 U.S.C. § 102(e) as being anticipated by Hinckley is proper.

Claim Rejections – 35 USC § 101

13. 35 U.S.C. § 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

14. Claims 1-5, 6-7 and 10 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Claims 1-5, 6-7 and 10 are not limited to “a practical application of an abstract idea which produced a useful, concrete, and tangible result.” State Street Bank & Trust v. Signature Financial Group, Inc., 149 F. 3d 1368, 1375 n. 9 (Fed. Cir. 1998).

Specifically, claims 1-5, 6-7 and 10 are directed to a method and apparatus and data carrier carrying instructions for testing an operational integrated software system. This system comprises software components, e.g., software program per se. Applicants thus fail to disclose that these software components are tangibly embodied and executed by a piece of hardware and that their functions have practical applications which produce useful, concrete, and tangible results under the State Street Formulation.

On this basis, claims 1-7 and 10 are rejected under 35 U.S.C. § 101.

Claim Rejections – 35 U.S.C. § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent,

except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language;

16. Claims 1-13 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,002,869 to Hinckley.

Claims 1 and 6

Hinckley discloses at least:

a) automatically registering each active element of said plurality of software elements in a registry, said registry comprising a plurality of registered software elements, each element of which is associated with a set of test criteria (see at least 7:6-58);

b) associating a set of test criteria with each registered active element of software (see at least 7:59-8:18);

c) selecting an active element registered in the registry and testing the active element in accordance with the associated set of test criteria (see at least Figure 3, step 310 and related discussion in the specification); and

d) capturing the results of the testing of the active element and comparing them to the associated test criteria (see at least 8:27-41).

Claims 2 and 7

The rejection of base claims 1 and 6 is incorporated. Hinckley further discloses *each element of software is arranged to automatically register an identification of itself in the registry* (see at least 7:6-58).

Claims 3 and 8

The rejection of base claims 1 and 6 is incorporated. Hinckley further discloses *each element of software is arranged to capture the results of its testing* (see at least Figures 2 and 8, block 210 and related discussion in the specification; 8:27-41).

Claims 4 and 9

The rejection of base claims 1 and 6 is incorporated. Hinckley further discloses *automatically providing a report on the results of the testing* (see at least Figures 2 and 8, block 210 and related discussion in the specification; 8:27-41).

Claims 5 and 10

The rejection of base claims 1 and 6 is incorporated. Hinckley further discloses *the test criteria are defined using a scripting language and said method further comprises the step of parsing the test criteria to convert them into a form for testing against* (see at least Figure 2, block 204; Figure 3, block 308; Figure 5; Figure 8, blocks 804, 806; and related discussion in the specification).

Claim 11

Claim 11 recites a computer readable data carrier loadable into a computer and tangibly embodying a program of instructions executable by the computer for causing the computer to carry out the same appropriate method steps of claim 1. Therefore, the same rejection is applied.

Claim 12

Claim 12 recites a computer readable data carrier loadable into a computer and tangibly embodying a program of instructions executable by the computer for enabling the computer to provide the same apparatus of claim 11, which performs the same method steps of claim 1. Therefore, the same rejection is applied.

Claim 13

Claim 13 recites a computer program product for testing an operational software system having a plurality of software elements comprising the same computer usable medium and computer readable code means to perform the same method steps of claim 1. Therefore the same rejection is applied.

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action

is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

18. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Hoang-Vu A. Nguyen-Ba whose telephone number is (571) 272-3701. The Examiner can normally be reached on Tuesday-Friday, 7:15 – 17:45.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Tuan Dam can be reached at (571) 272-3695.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**ANTONY NGUYEN-BA
PRIMARY EXAMINER**

Art Unit 2192

April 15, 2005